

REMARKS

In the Official Action mailed on **17 October 2006**, the Examiner reviewed claims 1-21. Claims 1-3, 5-10, 12-17, and 19-21 were rejected under 35 U.S.C. §103(a) as being anticipated by ASP Alliance (*Introduction to Validating User Input in Web Forms*, December 29, 2003, hereinafter “ASP”), in view of PBDR (“*SQL String Validation*”, June 24 2003 hereinafter “PBDR”). Claims 4, 11, and 18 were rejected under 35 U.S.C. §103(a) as being unpatentable over ASP, in view of PBDR, and further in view of The PHP Group (*Error Handling and Logging Functions*, November 27, 2003, hereinafter “PHP”)

Rejections under 35 U.S.C. §103(a)

Independent claims 1, 8, and 15 were rejected as being anticipated by ASP in view of PBDR. Applicant respectfully points out that ASP teaches using validation controls to validate user inputs received via web forms (see ASP, page 1, fourth paragraph). Furthermore, ASP teaches that there are different kinds of validation. However, ASP does not teach using signatures to detect structured query language (SQL) injection (see ASP, page 1, second paragraph). Moreover, ASP is limited to web forms (see ASP, page 1, first paragraph).

In contrast, the present invention teaches parsing an SQL query at a database to determine if the signature exists in a database of valid query signatures (see paragraph [0029], and see paragraphs [0033]-[0034] of the instant application). Note that the present invention teaches validating the SQL query at the database and therefore, unlike ASP, is not limited to web-applications (see paragraph [0034] and FIG. 4 of the instant application). Furthermore, the present invention teaches a method geared specifically towards preventing SQL injection attacks, which is in contrast to ASP, which teaches a method for initiating validation code in general, but does not teach a method for stopping SQL injection.

Examiner avers that PBDR teaches query signatures. Applicant respectfully disagrees. PBDR teaches validating a string to identify invalid characters. This is different from creating and validating a signature, which may consist entirely of valid characters, but may be structured in such a manner as to enable a malicious user to perpetrate a cyber attack on the database. For example, suppose that the query:

SELECT prize, color FROM inventory WHERE ProdID =5 OR 1=1

is invalid because of the “OR 1=1” clause. PBDR would be unable to identify this query as invalid because it does not contain any invalid characters. In contrast, the present invention would detect the query as invalid because the structure is invalid. Therefore, the present invention would prevent the database from executing the query.

Accordingly, applicant has amended independent claims 1, 8, and 15 to clarify that the present invention parses the query at the database. These amendments find support in paragraphs [0029] and [0033]-[0034], and in FIG. 4 of the instant application.

Hence, Applicant respectfully submits that independent claims 1, 8, and 15 as presently amended are in condition for allowance. Applicant also submits that claims 2-7, which depend upon claim 1, claims 9-14, which depend upon claim 8, and claims 16-21, which depend upon claim 15, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

CONCLUSION

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

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